MARCH 11,2004

### REGIONAL DIRECTOR'S OFFICE



(L to R) Vickie Nadolski, Troy Nicolini, and Nancy Dean pose for a photo following presentation of the Isaac M. Cline Award

Troy Nicolini Receives National Cline Award: On March 3, I presented the Issac M. Cline Award to Service Hydrologist Troy Nicolini during a visit to WFO Eureka. The Cline Award is National Weather Service's highest honor. Troy was one of 11 national winners selected in 2003.

Employees selected for Cline Awards have clearly demonstrated excellence in both their operational skills and in the delivery of products and services in support of the National Weather Service mission. Troy successfully completed a series of projects in research, training, and outreach, with local and national significance. In the research arena, Nicolini developed an innovative method to estimate the flood stage for river forecast points, and

he pioneered work in forecast methods for the interface between rivers and the ocean.

Troy identified the need for a new forecast point on the Navarro River in Mendocino County. Prior to the establishment of this forecast point, crews from the California transportation department drove along the road to determine when to close roads. With the introduction of the forecast point, CalTrans can now close the road prior to flooding and thereby increase safety. This will save people who attempt to drive this two-lane, winding road more than a two-hour drive if they have to turn back due to flood conditions. It will also help reduce the chance of a vehicle-related flooding death.

Recently Troy also worked to develop forecasting methods for the area of interaction between river estuaries and coastal storms. He also collaborated with other agencies to develop various web-based national training modules for hydrology.

The overall impacts of Troy's efforts can be seen by a dramatic drop in river-related deaths and a better understanding of many issues related to hydrology impacts in Northern California. Congratulations, Troy!

**NOAA Organization Chart**: NOAA Public Affairs has prepared an organization chart. It's in PDF format, and you can find it on the NOAA home page under "About NOAA," which is on the top, left-hand side of the page.

http://www.noaa.gov/pdf/noaa-org-chart030804.pdf.

### **METEOROLOGICAL SERVICES DIVISION**

Statement of the Week: This week's Statement of the Week is a Winter Weather Advisory issued by Chris Zelzer, Bernie Meier, and Ken Pomero of WFO Great Falls, Montana. The Advisory was issued on Monday, March 1 at 3:40 a.m. for north central and parts of southwest Montana for Tuesday and Tuesday night. Since the area had experienced an extended period of above normal temperatures and fairly windless days a change to colder, snowy weather was significant for travel and outdoor activities. When the snow and wind arrived, temperatures fell quickly through the 20s and into the teens Tuesday afternoon and evening with most locations picking up about two inches of new snow. Roads were a mess in most spots as the new snow quickly melted on the warm surfaces to only freeze hard by late afternoon. The Advisory provided a "heads up" with 24-36 hours lead time. Good work Great Falls!

ZCZC GTFWSWTFX WWUS45 KTFX 011021

URGENT - WINTER WEATHER MESSAGE NATIONAL WEATHER SERVICE GREAT FALLS MT 321 AM MST MON MAR 1 2004

MTZ009>014-044>051-054-011800-

BLAINE CASCADE-CENTRAL AND SOUTHERN LEWIS AND CLARK-CHOUTEAU-BLAINE CASCADE-EASTERN PONDERA-EASTERN TETON-FERGUS-HILL-JUDITH BASIN-LIBERTY-MEAGHER-NORTHERN ROCKY MOUNTAIN FRONT-SOUTHERN ROCKY MOUNTAIN FRONT-TOOLE-321 AM MST MON MAR 1 2004

...WINTER WEATHER ADVISORY IN EFFECT FROM 6 AM TUESDAY TO 12 AM MST WEDNESDAY...

SNOW WILL DEVELOP NEAR THE CANADIAN BORDER TUESDAY MORNING AND SPREAD SOUTH DURING THE DAY. SNOW ACCUMULATIONS OF 1 TO 3 INCHES ARE EXPECTED ACROSS THE PLAINS AND VALLEYS WITH 4 TO 8 INCHES EXPECTED IN THE MOUNTAINS.

A WINTER WEATHER ADVISORY IS NORMALLY ISSUED FOR A VARIETY OF WINTER WEATHER CONDITIONS SUCH AS LIGHT SNOW...BLOWING SNOW... SLEET...FREEZING RAIN AND EXTREME WIND CHILLS. WHILE THE WEATHER WILL BE SIGNIFICANT...THE WORD ADVISORY IMPLIES THAT SEVERE WINTER WEATHER IS NOT ANTICIPATED.

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NNNN

WFO Los Angeles/Oxnard Conducts Marine Seminars: WFO Los Angeles/Oxnard conducted seven Marine Weather Seminars throughout their forecast area during the week of February 9-13, led by Tim McClung (WCM) and Joe Sirard (Marine Focal Point). Two seminars (each) were held in Santa Barbara and Morro Bay, with one (each) in Ventura, Avalon, and Manhattan Beach. A total of 66 people participated, with the highest attendance in Ventura and Manhattan Beach (20 each). The purpose of these seminars was to educate marine users about the products and services provided by WFO Los Angeles/Oxnard, emphasizing marine data available on the Internet, NOAA Weather Radio, weather kiosks, and digital (gridded) forecasts. Another very important aspect of the seminars was the opportunity to receive direct feedback from users. The feedback will be used to assess user needs and, ultimately, to enhance and improve the local marine program.

The participants overwhelmingly indicated the usefulness of these seminars and expressed their gratitude for having the opportunity to attend. Additionally, the majority greatly appreciated the efforts of the WFO Los Angeles/Oxnard staff. The overall impression of their forecast products and services was very positive. Participants requested additional seminars in the future, and the staff hopes to be able to provide them on an annual basis.



WFO Medford WCM James Reynolds (seated, right) and Journeyman Forecaster Dan Weygand (seated, left) display WFO Medford's Internet page to onlookers.

13,000 Visit WFO Medford NOAA Booth: During the last weekend of February, WFO Medford participated in the Medford, Oregon Outdoor Sportsmen Show by staffing a NOAA booth. Through a wireless Internet connection, the staff promoted local NWS products and services, focusing on WFO Medford's web page. Attendees were shown IFPS graphical forecasts, Advanced Hydrologic Prediction System (AHPS) products, and Climate information. Marine products and services were also given a strong emphasis. Additionally, customers were notified of a new telephone number at WFO Medford for accessing marine-only forecasts, covering the area from northern California to southern Washington.



WFO Pocatello staff Bob Survick and Bill Snyder provide career information to attendees.

# WFO Pocatello Participates in BYU-Idaho Career

Fair: On March 4, WFO Pocatello participated in a career fair at Brigham Young University-Idaho in Rexburg, Idaho. Staff members Vernon Preston (WCM), Bill Snyder (ITO), Bob Survick (Lead Forecaster), and Gary Wicklund (HMT) highlighted the wide variety of NOAA job opportunities for graduating college students, as well as providing an overview of other opportunities available in Federal service. Information packets on student internships and applying for federal positions were distributed. Approximately 2,500 students attended the fair.



2004 Tsunami Coordination Meeting attendees pose for group photo.

Western Region Participates in Pacific Basin
Tsunami Coordination Meeting: On March 2-4,
Western Region participated in a Tsunami
Coordination Meeting in Honolulu, Hawaii. This
meeting was a joint effort involving NWS and a
combination of other federal and state agencies.
Attendees from NWS included representatives from
the three NWS regions in the Pacific Basin (Western,
Alaska, and Pacific Regions; regional headquarters
representatives and field WCMs), Southern Region
Headquarters, NWS Headquarters, Pacific Tsunami
Warning Center (PTWC), and West Coast/Alaska

Tsunami Warning Center (WC/ATWC)). Additionally, representatives from NOAA's Pacific Marine Environmental Laboratory (PMEL), U.S. Dept. of Homeland Security/Federal Emergency Management Agency (FEMA), National Ocean Service, U.S. Geological Survey, NOAA Pubic Affairs, the National Data Buoy Center (NDBC), and various state agencies also attended.

The meeting focused on improving tsunami warning procedures, as well as associated outreach, education, and media issues. NWS Pacific Region Headquarters (PRH) hosted the meeting. Jeff LaDouce (Director, NWS Pacific Region) opened the meeting by emphasizing the importance of the issues at hand, and indicated this group represented the "movers, shakers, and doers" of the tsunami warning program. Operational briefings were provided by PTWC (located in Hawaii), WC/ATWC (in Alaska), and the International Tsunami Information Center (ITIC). Intensive group discussions occupied most of the meeting's agenda, focusing on communications, warning dissemination, and other related issues. The group also had an opportunity to tour PTWC, where they received a detailed briefing describing tsunami warning procedures in the Pacific Basin.

It had been five years since a meeting of this kind was held. Since 1999, there have been many changes in staff, products, and procedures. Bringing this group together was, therefore, all the more important. As a result of this year's meeting, some key decisions were made and many actions taken — all with the aim of improving the NWS tsunami warning program.



Ray Nickless (WFO Missoula Service Hydrologist) and Ed Clark (WFO San Diego WCM).

San Diego WCM Visits WFO Missoula to Learn About Burn Areas: WFO San Diego's WCM, Ed Clark, visited WFO Missoula for two days to learn about how the office has prepared for flash flood potential, due to several years of forest fires which resulted in many large and severe burn areas in western Montana. To learn about how Missoula handled this situation, Ed met with Peter Felsch (WCM) and Ray Nickless (Service hydrologist). Peter and Ray took Ed on a tour of the burned areas and discussed the office's flash flood guidelines and procedures.



WFO Monterey Intern Rebecca Waddington challenged students to gain altitude by using their lungs to remove air from a bell jar with an enclosed altimeter.



WFO Monterey Student Intern Jon Bonk demonstrates the effects of higher altitude and lower pressure.

NWS Monterey at two Math and Science Conferences: On February 28, meteorologists from WFO Monterey participated in two conferences designed to help female students learn about careers in science and mathematics.

NWS participated in the 7th annual Girls' Math and Science Conference at the California State University at Monterey Bay (Co-sponsored by the American Association of University Women, and the University's Division of Science and Environmental Policy). The conference theme was "Rain or Shine: The Science of Weather and Climate." Approximately 40 sixth, seventh, and eighth grade girls gained first-hand experience when they attended each of the two workshops led by women scientists.

The second conference was an area-wide career conference for young women in grades six through 12. Students attending the "Tri-Valley Expanding Your Horizons in Science and Mathematics" conference in San Ramon, California, met young scientists who work in various math and science-related careers and learned what educational requirements are needed to pursue advanced degrees in meteorology and hydrology as well as how NWS personnel use this knowledge as they prepare daily forecasts, watches and warnings.

Representing the NWS were student Interns Jon Bonk and Rebecca Waddington.

Pacific Northwest Weather Workshop: The annual Pacific Northwest Weather Workshop was held February 27-28 at NOAA's facilities in Seattle. WFO Seattle was one of the co-sponsors of the event. Other co-sponsors were the University of Washington and Puget Sound Chapter of the American Meteorological Society. Topics included recent developments in weather forecasting and observational technologies, major weather events of the past year, western U.S. meteorology, weather and surface transportation in the Pacific Northwest, major regional weather events of 2003/04 including the recent February 2004 snow and ice storm, local modeling efforts, and the transition to gridded forecast dissemination in the Pacific Northwest. Washington State University Professor Dan Jaffe discussed Asian sources of Northwest air pollution.



WFO Pocatello Lead Forecaster Bob Survick provides a weather briefing to the Congressional staff.

WFO Pocatello Hosts Congressional Delegation: On March 3, WFO Pocatello staff hosted Congressional visitors. Nine Congressional staff members from the Twin Falls and Pocatello offices of U.S. Senator Larry Craig, U.S. Senator Mike Simpson, and U.S. Representative Mike Crapo participated in the tour and special briefing. The Congressional visitors attended the daily operations briefing. This was followed with an overview briefing on the capabilities of NWS digital services, an update on the current drought monitor and outlook, the spring flood potential for southeast Idaho,



MIC Jim Meyer emphasizes the NWS's main mission of providing forecast and warning services for weather, water, and climate and showed the availability of this data in real-time displays.

and a demonstration of the NWS Pocatello web site for day-to-day briefings and planning. With the drought conditions prevailing for the past four years in Idaho, they showed heightened concern and asked many questions about the climate and hydrologic programs. The staff discussed NWS' many partnerships with both private and other governmental agencies for data sharing and also how they use NWS products to provide cost reductions and enhance the economy. Before departing, each visitor was provided with a special packet containing materials that define and explain local services being provided to southeast Idaho by NWS Pocatello, a Western Region flyer, and several maps including Idaho County Warning Areas, public and fire weather zone forecast area, and NOAA Weather radio coverage area.

### SCIENTIFIC SERVICES DIVISION

<u>Updated Western Region NWS Directive Supplement</u>: An updated version of NWS Western Region Supplement 04-2003, "Forecaster Development Program Training," may be found on the NWS Directive Systems home page or on the Western Region Intranet at: <a href="http://ww2.wrh.noaa..gov/amd/ROMLfiles/ROMLindex.htm">http://ww2.wrh.noaa..gov/amd/ROMLfiles/ROMLindex.htm</a>. Changes from the previous issuance were minor ranging from NWS directive references to the elimination of one outdated course and the addition of DLAC 1: Fog Forecasting/Low Stratus for Aviation Operations. Offices are encouraged to use the Intern Progress Report in this Supplement when filing their Intern training updates. The next one is due on April 15, 2004. Mark Mollner (SSD) is the focal point.

<u>Annual Web Page Compliance - Due March 22</u>: The annual web page compliance is due March 22. The instructions have been sent out to each office. Ed Ridley (SSD) is the contact.

**WR PD&T and Intern Report - Due April 15**: The office semi-annual Professional Development and Training Plan (PD&T) Report is due April 15.

WR CNRFC SOO-DOH Meeting - March 30: As part of the WR RFC/WFO collaboration plan, SSD is organizing SOO/DOH meetings at each RFC for the WFOs covered by the RFC's area. The first meeting will occur March 30 at the CNRFC. The focus of the meeting is to foster greater RFC/WFO collaboration and effectively link SOOs and DOHs to address relevant science issues. Similar meetings will be held later this spring at the NWRFC and CBRFCs. Kevin Werner (SSD) is the contact for questions.

<u>ISST</u>: The IFPS Science Steering Team (ISST) provided two progress updates during the last few weeks. The ISST is working on a set of science recommendations for OST on how to improve the IFPS. WR is represented by two SOOs - Brad Colman (Team Lead) and Mark Jackson (WR Representative). A copy of the latest ISST proposals was sent to all WR SOOs and DOHs.

<u>DGEX is Coming</u>: The ISST has been working with NCEP and OST to produce a better set of downscaled model based grids that can be used as a first guess fields for days 4-7 of the IFPS forecast grids. The project is called Downscaled GFS with Eta Extension (DGEX) and is the first step of several planned to provide a better suite of downscaled model grids. Kirby Cook (SSD) is working on the DGEX grid decoding and LDM transfer for all of the CONUS evaluation offices. Tim Barker (SOO-Boise) has developed a set of baseline Smart-Init tools for DGEX.

### The schedule is:

March 15: \* CONUS and AR evaluation (at approximately 8-12 offices nation wide)

Forecasters at a subset of WFOs to assess impact on IFPS

operations

Use Regional Wide Area Network (WAN) to distribute data to test

sites

Late May: \* Implementation of DVB-S that will free up AWIPS SBN bandwidth

June: \* OB3.2 upgrade to AWIPS configuration to display DGEX fields

\* DGEX operational via AWIPS SBN

## List of proposed DGEX fields:

\* Pressure at surface and MSL

- \* T and RH at 2 m, 0-30mb, 30-60mb, 60-90mb, 90-120mb, 120-150mb
- \* U and V wind at 10 m, 0-30mb, 30-60mb, 60-90mb, 90-120mb, 120-150mb
- \* Total Precip at surface
- \* Total Cloud Cover
- \* Max/Min temperature at 2 m
- \* Weather Smart Init fields

Probability of Freezing Precip

Probability of Frozen Precip

Probability of Thunderstorms

Terrain height (only once - not every time-step)

\* Synoptic parameters (for assessment of model synoptics):

Sea Level Pressure

1000 mb Z

850, 700, 500 mb Z, T, RH, U, V

700 mb omega

250 mb Z, U, V

Surface based lifted index

# California-Nevada River Forecast Center (CNRFC) QPF Grids Distributed to

<u>WFOs</u>: The CNRFC HAS routinely edits QPF grids for input to their hydrologic models. WR/SSD is distributing these grids through the WR Wide Area Network (WAN) to the WFOs under the CNRFC umbrella. The grids are viewable on AWIPS and the GFE. This purpose of this effort is to provide the WFOs with another set of first guess QPF fields for the Forecast Office IFPS grids and improve coordination between the RFC and WFOs. Kirby Cook (SSD) is the contact.

Advanced Warning Operations Course (AWOC): The dates for the "train the trainer" portion of The Advanced Warning Operations Course have been set. All WFOs/RFCs are required to send the SOO/DOH or radar focal point to this one week course at the WDTB in Norman OK. WR course slots will be weighted toward the September course dates in case of another busy fire weather season. A formal call for WR WFO trainers to request their course week will occur in mid-February with a mid-March deadline.

WFOs should take this mandatory course into account when setting up their summer annual leave schedule over the next few months. The AWOC course

August 3-5, 2004 August 17-19, 2004 August 24-26, 2004 August 31-September 2, 2004 September 14-16, 2004 September 21-23, 2004

dates are:

AWOC will provide updated radar training to all NWS forecasters in the fall and winter of 2004/2005.

<u>April Teletraining Courses</u>: The Virtual Institute for Satellite Integration Training (VISIT) and the Integrated Sensor Training Professional Development Series (ISTPDS) sessions for April are listed below. Offices can register for the teletraining sessions by sending email to: visit@comet.ucar.edu. To access the teletraining calendar, go to: <a href="http://www.cira.colostate.edu/ramm/visit/ecal.asp">http://www.cira.colostate.edu/ramm/visit/ecal.asp</a>.

The teletraining planning calendar with sessions offered by COMET (DLAC), Interactive Forecast Preparation System (IFPS) and Warning Decision Training Branch (WDTB) is at: http://www.cira.colostate.edu/ramm/visit/planning.html.

The sessions currently scheduled for April are:

**NEW** - Mesoscale Convective Vortices (April 6,8,14,16,19,22,27,30)

Water Vapor Channel Satellite Imagery (April 20,23,28)

Applying the Ten Principles of Climate Monitoring in NWS Field Operations (April 15,29)

The Enhanced-V: A Satellite Severe Storm Signature (April 9,26)

Lightning Meteorology I (April 12)

Lightning Meteorology II (Advanced, April 13)

Mesoscale Analysis of Convective Weather Using GOES RSO Imagery (April 1) Use of GOES/RSO imagery with other Remote Sensor Data for Diagnosing Severe Weather across CONUS (RSO 3)

Part 1 (Intermediate, April 6,21)

Part 2 (April 7,22)

Cyclogenesis: Analysis utilizing Geostationary Satellite Imagery (April 2)

<u>COMET Outreach Proposal Deadlines, March 15</u>: The Cooperative Program for Operational Meteorology, Education, and Training (COMET) has announced its 2004 Outreach Program Request for Proposals (RFP) for Cooperative Projects. The final version of the NWS Cooperative proposal must be submitted to the COMET Outreach Program by March 15, 2004.

The Cooperative Projects may be one to three years in duration and typically have budgets with a range from about \$20,000 to \$41,000. More information and submission requirements can be found online at: <a href="http://www.comet.ucar.edu/outreach/coop.htm">http://www.comet.ucar.edu/outreach/coop.htm</a>.

The COMET Program is also accepting proposals for Partners Projects. The average Partners Project has been approximately \$7,000 (excluding those items funded directly by the NWS). Since Partners Project funds are limited, it is unlikely a proposal will be funded if its budget significantly exceeds the average. Additional information and submission requirements are available at: <a href="http://www.comet.ucar.edu/outreach/part.htm">http://www.comet.ucar.edu/outreach/part.htm</a>.

### SYSTEMS OPERATIONS DIVISION

<u>UPS</u>: The upgrade of the WFO Uninterrupted Power Supplies continues. The week of March 7<sup>th</sup> WFO Missoula will be upgraded. Lee Jenson and Mike Hume will install the UPS.

**SOD Program Reviews**: The San Diego and Oxnard offices are the next two offices on SOD's list for program reviews. These reviews will be conducted during the week of March 14. The schedule for the program reviews for the rest of this fiscal year can be found on the Intranet SOD web page.

**ORPG Build 5**: The ORPG Build 5 beta which includes a firewall, has been installed at Phoenix for the Yuma (KYUM) radar. This install supports moving the Archive Level II data onto NWSNet and then to NCDC. According to the Phoenix ESA, Frank Stewert, the install of the OPRG Build 5 software and the firewall went very well.

**AWPAG**: Kevin Bolton (WRH) and Steve Kusyj (LOX) are working with WSH and contractors installing the first batch of the all weather precipitation accumulation gauges (AWPAG). Kevin is working with Alberto Jimenez (of the Las Vegas Office) and Steve Kusyj will concentrate on the Southern California area.

### ADMINISTRATIVE MANAGEMENT DIVISION

#### Outreach:

March 12, 2004

WR Participates in UC Davis Career Fair: On February 19, 2004, Kayda Muckey



(L to R): Kayda Muckey, John Juskie, and Shelley Heaps staffed a NWS booth at UC Davis's Winter Internship and Career Fair.

(STEP student, WFO Sacramento), John Juskie (Lead Forecaster, WFO Sacramento), and Shelley Heaps (Equal Employment Manager, Western Region Headquarters) staffed a National Weather Service booth at UC Davis's Winter Internship and Career Fair. On February 18, 2004, John Juskie and Shelley Heaps also gave a career information presentation to a group of students sponsored by UC Davis's Chapter of the National Society of Minorities in Agriculture, Natural Resources, and Related Sciences and Club of the College of Agricultural and Environmental Sciences.